

**IN THE FEDERAL DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF WEST VIRGINIA  
MARTINSBURG DIVISION**

**KIM BARRETT, ASHLEY BOULAFENTIS,  
ZACK BURTT, MICHAEL CASTELGRANDE,  
CATHERINE SMITHMEYER, MARCUS  
CHICHESTER, DAWN COOKUS,  
ANNETTE COOPER, MARIA CORTEZ,  
COURTNEY FISHER, CAROL CRIM,  
DANIEL ROBERSON, JEANETTE  
DAUGHERTY, DAVID SMITH, DEENA  
BRITTON, KIMBERLY DESHONG individually  
and on behalf of S.D., a minor,  
BRITTANY DEVOR, SARAH DUCKWALL,  
DYLAN HITE, ROBERT EATON,  
SEBASTIAN FERREIRA, GREG ARPIN,  
JOANNA GRUBB, JOYCE HAINES, CINDY  
HARDEN, HEATHER SCHEUCH,  
VINCENT HOSBY, STEPHANIE HULL,  
CATHERINE HUMMER, APRIL JACKSON,  
JODI PARTSCH, JOHN WHITCOMB,  
KATHRYN WHITCOMB, DONALD KEES,  
LAUREN NICHOLSON, JOHN LEVY,  
WILLIAM LUTHER, ROSEMARY LYNCH,  
MALISA BUTLER, MARCUS HILLIARD,  
MARGARET GRABILL, AMBER MCLEOD,  
DARLENE MELVIN, GARY MELVIN,  
STEPHANIE MONGAN, PATRICK MORAN,  
MORGAN MCCARDELL, ROBERTA NEIZER,  
CHARLES PINCKNEY, LAURA PUTMAN,  
VICKI RICH, VICTORIA RITTINER,  
SHEILA ROBINSON, TONY ROBINSON,  
SHACOLE ROLLE, LINDA SCHMIDT,  
GARLAND SEE, CARL SHAFFER,  
PAUL SHELTON, PENNY SHELTON,  
MICHELLE SMITH, MARK SMITHMEYER,  
IRWIN SNOW, SHANNON SPIKER,  
JOHN STAMAT, GARY STANLEY,  
STEPHANIE KEMPER-WEBB, JONATHAN**

**TAYLOR, TENA WARE, AMANDA TREVINO,  
ANNE WALSH, JOANN WATKINS, MARK  
WETZEL, JENNIFER WHETZEL, DEANNA  
WIDMEYER, ROBERTA WILSON, ROY  
WILSON, BERNARD WOLF, CAROLINE  
ZDZIERA, and SUSAN FILES on behalf of the  
ESTATE OF MARVIN HESS,**

**Plaintiffs,**

**v.**

**Civil Action No. \_\_\_\_\_**

**3M COMPANY (F/K/A Minnesota Mining  
and Manufacturing Co.), BUCKEYE FIRE  
EQUIPMENT CO., CHEMGUARD,  
THE CHEMOURS CO., LLC,  
E.I DUPONT DE NEMOURS & CO.,  
NATIONAL FOAM, INC.,  
and TYCO FIRE PRODUCTS L.P.,  
successor-in-interest to  
THE ANSUL COMPANY,**

**Defendants.**

**FIRST AMENDED COMPLAINT**

Plaintiffs, by and through their undersigned counsel, Stephen G. Skinner, Levi B. Pellegrin, and the Skinner Law Firm, hereby file this action against Defendants, THE 3M COMPANY (f/k/a Minnesota Mining and Manufacturing, Co), BUCKEYE FIRE EQUIPMENT CO., CHEMGUARD, CHEMOURS, E.I. DUPONT DE NEMOURS, NATIONAL FOAM, and TYCO FIRE PRODUCTS L.P., successor-in-interest to THE ANSUL COMPANY.

## **INTRODUCTION**

1. Plaintiffs bring this action against Defendants for compensatory relief for personal injuries sustained due to the intentional, knowing, reckless, and/or negligent action or omissions leading to the contamination of Plaintiffs' drinking water by Defendants through the design, marketing, development, manufacture, distribution, release, training, and sale of AFFF containing PFAS.

2. Aqueous Film Forming Foam ("AFFF") is a specialized substance designed to extinguish petroleum-based fires. It has been used for decades and continues to be used by military firefighters to put out fires and in training and response exercises in preparation for fires.

3. AFFF contains synthetic, toxic per- and polyfluoroalkyl substances collectively known as "PFAS."<sup>1</sup> PFAS bind to proteins in the blood of animals and humans exposed to such materials and not only remain and persist over long periods of time, but, due to their unique chemical structure, accumulate and build up in the blood/body of the exposed individuals with each additional exposure, no matter how small. PFAS can travel long distances, move through soil, seep into groundwater, or be carried through air.

4. Defendants collectively designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF with knowledge that it contained highly toxic and long lasting PFASs, which would contaminate the blood and/or bodies of Plaintiffs with PFAS, and the

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<sup>1</sup> "PFAS" includes but is not limited to perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonic acid ("PFOS") and related chemicals, including but not limited to those that degrade to PFOA and/or PFOS, and including but not limited to C3-C-15 PFAS chemicals, such as perfluorohexanesulfonate (PFHxS), perfluorononanoate (PFNA), perfluorobutanesulfonate (PFBS), perfluorohexanoate (PFHxA), perfluoroheptanoate (PFHpA), perfluoroundecanoate (PFUnA), perfluorododecanoate (PFDoA), HFPA Dimer Acid (CAS # 13252 -13-6/C3 Dimer Acid/P-08-508/FRD903/GX903/C3DA/GenX), and HFPA Dimer Acid Ammonium Salt (CAS#62037-80-3/ammonium salt of C3 Dimer Acid/P-08- 509/FRD902/GX903/GenX).

resultant biopersistence and bioaccumulation of such PFAS in the blood and/or bodies of Plaintiffs.

5. In May 2014, the City of Martinsburg conducted PFOS/PFOA sampling of its water supply under the Unregulated Contaminant Monitoring Rule Phase 3 (“UCMR3”) and detected PFOS in the Big Springs well at 74 parts per trillion (ppt). Another test in May 2016 showed PFOS at 114 ppt and PFOA at 20 ppt, which together are well above the current Environmental Protection Agency Health Advisory of 70 ppt.

6. A joint investigation conducted by several state and federal agencies including the 167<sup>th</sup> Airwing Air National Guard base, Environmental Protection Agency, Department of Environmental Protection, and the City of Martinsburg concluded that the source of the PFOS/PFOA and other poly-fluorinated compounds (“PFCs”) was coming from the use of AFFF at the 167th Air Wing at Shepherd Field Air National Guard Base (“167th AW” or “airbase”).

7. The testing and investigations showed that Plaintiffs had been exposed to AFFF containing PFAS through Plaintiffs’ drinking water. Plaintiffs suffered personal injuries as a result.

### **JURISDICTION AND VENUE**

8. This Court has jurisdiction over the subject matter of this Complaint, pursuant to 28 U.S.C. §1332(a), as the parties are completely diverse in citizenship and the amount in controversy exceeds \$75,000.00, exclusive of interests and costs.

9. The Northern District of West Virginia has personal jurisdiction over the Defendants because Defendants conduct substantial business in West Virginia and within the Northern District of West Virginia. Defendants have sufficient minimum contacts with West

Virginia and intentionally avail themselves of the consumers and markets within West Virginia through the promotion and sale of their products, including AFFF.

10. Venue is proper in the United States District Court for the Northern District of West Virginia because “a substantial part of the events or omissions giving rise to the claim occurred” in this District, 28 U.S.C. § 1391(b)(2), and Defendants are subject to the personal jurisdiction of this Court, 28 U.S.C. §1391(b)(3), (c)(2).

### **PARTIES**

11. Plaintiff Kim Barrett is a resident of Berkeley County, West Virginia, and works at the 9-11 call center in Martinsburg. As a result of Ms. Barrett’s exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Barrett has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

12. Plaintiff Ashley Boulafentis is a resident of Berkeley County, West Virginia. As a result of Ms. Boulafentis’s exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Boulafentis has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has developed thyroid issues including Hashimoto’s thyroiditis, autoimmune disorders, digestive issues, blood pressure issues, and irregular heartbeat and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

13. Plaintiff Zack Burt is a resident of Berkeley County, West Virginia, where he has lived most of his life. As a result of Mr. Burt’s exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Burt has elevated levels of PFOA, PFOS, and/or

PFCs in his blood. Mr. Burt developed kidney cancer and had his kidney removed in 2019 and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, and changes in thyroid hormone.

14. Plaintiff Michael Castelgrande is a resident of Berkeley County, West Virginia. As a result of Mr. Castelgrande's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Castelgrande has elevated levels of PFOA, PFOS, and/or PFCs in his blood and has developed severe kidney issues which lead to a kidney failure and dialysis and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

15. Plaintiff Catherine Smithmeyer is a resident of Berkeley County, West Virginia. As a result of Ms. Smithmeyer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Smithmeyer has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid cancer, increased cholesterol, and increased uric acid levels, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

16. Plaintiff Marcus Chichester is a resident of Jefferson County, West Virginia. As a result of Mr. Chichester's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Mr. Chichester has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Chichester developed prostate cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

17. Plaintiff Dawn Cookus is a resident of Berkeley County, West Virginia. As a result of Ms. Cookus's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Cookus has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with immune and reproductive issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

18. Plaintiff Annette Cooper is a resident of Berkeley County, West Virginia. As a result of Ms. Cooper's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Cooper has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with breast cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

19. Plaintiff Maria Cortez is a resident of Berkeley County, West Virginia. As a result of Ms. Cortez's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Cortez has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid tumors, and increased cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

20. Plaintiff Courtney Fisher is a resident of Berkeley County, West Virginia. As a result of Ms. Fisher's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Fisher has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with several auto-immune diseases, and thyroid issues and is at increased risk of

developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

21. Plaintiff Carol Crim is a resident of Berkeley County, West Virginia. As a result of Ms. Crim's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Crim has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with kidney cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

22. Plaintiff Daniel Roberson is a resident of Washington County, Maryland. As a result of Mr. Roberson's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Mr. Roberson has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Roberson developed male breast cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

23. Plaintiff Jeanette Daughtery is a resident of Berkeley County, West Virginia. As a result of Ms. Daughtery's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Daughtery has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid issues, and Grave's disease and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

24. Plaintiff David Smith is a resident of Berkeley County, West Virginia. As a result of Mr. Smith's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Smith has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Roberson



developed kidney cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

25. Plaintiff Deena Britton is a resident of Berkeley County, West Virginia. As a result of Ms. Britton's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Britton has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

26. Plaintiff Kimberly DeShong is a resident of Berkeley County, West Virginia. As a result of Ms. DeShong's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. DeShong has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

27. Plaintiff S.D., a minor, is a resident of Berkeley County, West Virginia, and the daughter of Kimberly DeShong. As a result of S.D.'s exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, S.D. has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

28. Plaintiff Brittany Devor is a resident of Berkeley County, West Virginia. As a result of Ms. Devor's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking

water supply, Ms. Devor has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

29. Plaintiff Sarah Duckwall is a resident of Berkeley County, West Virginia. As a result of Ms. Duckwall's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Duckwall has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with thyroid cancer, and fertility issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

30. Plaintiff Dylan Hite is a resident of Berkeley County, West Virginia. As a result of Mr. Hite's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Hite has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Hite developed hypothyroidism, and blood pressure issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

31. Plaintiff Robert Eaton is a resident of Berkeley County, West Virginia. As a result of Mr. Eaton's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Eaton has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Eaton developed prostate cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

32. Plaintiff Sebastian Ferreira is a resident of Berkeley County, West Virginia. As a result of Mr. Ferreira's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Ferreira has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Ferreira developed psoriatic arthritis and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

33. Plaintiff Greg Arpin is a resident of Sumter County, Florida. As a result of Mr. Arpin's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Mr. Arpin has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Arpin developed hypothyroidism and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

34. Plaintiff Joanna Grubb is a resident of Berkeley County, West Virginia. As a result of Ms. Grubb's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Grubb has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with Hashimoto's, Likens Platus, and hypertension and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

35. Plaintiff Joyce Haines is a resident of Berkeley County, West Virginia. As a result of Ms. Haines's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Haines has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with Hashimoto's disease and is at increased risk of developing several health

conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

36. Plaintiff Cindy Harden is a resident of Berkeley County, West Virginia. As a result of Ms. Harden's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Harden has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has been diagnosed with hyper and hypothyroidism, high cholesterol, hypertension, and autoimmune diseases and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

37. Plaintiff Heather Scheuch is a resident of Berkeley County, West Virginia. As a result of Ms. Scheuch's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Scheuch has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with early onset puberty, polycystic ovarian syndrome, and hypertension and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

38. Plaintiff Vincent Hosby is a resident of Berkeley County, West Virginia. As a result of Mr. Hosby's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Hosby has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Hosby developed lymphoma in his neck and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

39. Plaintiff Stephanie Hull is a resident of Berkeley County, West Virginia. As a result of Ms. Hull's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking

water supply, Ms. Hull has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with Sarcoidosis and nodules on her thyroid and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

40. Plaintiff Catherine Hummer is a resident of Berkeley County, West Virginia. As a result of Ms. Hummer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Hummer has elevated levels of PFOA, PFOS, and/or PFCs in her blood and has fertility issues, is unable to maintain pregnancies, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

41. Plaintiff April Jackson is a resident of Berkeley County, West Virginia. As a result of Ms. Jackson exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Jackson has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with thyroid cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

42. Plaintiff Jodi Partsch is a resident of Berkeley County, West Virginia. As a result of Ms. Partsch's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Partsch has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with fertility issues, pregnancy induced hypertension, pre-eclampsia, and nodules on her thyroid and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

43. Plaintiff John Whitcomb is a resident of Berkeley County, West Virginia. As a result of Mr. Whitcomb's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Whitcomb has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Whitcomb developed high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

44. Plaintiff Kathryn Whitcomb is a resident of Berkeley County, West Virginia. As a result of Ms. Whitcomb's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Whitcomb has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

45. Plaintiff Donald Kees is a resident of Sarasota County, Florida. Mr. Kees worked as a firefighter at the 167<sup>th</sup> Air National Guard base from 1972-1980 and again from 1990-2004. As a result of Mr. Kees's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Kees has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Kees developed kidney cancer, colon cancer, auto immune issues, hypertension, polymyalgia rheumatica, and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

46. Plaintiff Lauren Nicholson is a resident of Berkeley County, West Virginia. As a result of Ms. Nicholson's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Nicholson has elevated levels of PFOA, PFOS, and/or PFCs in her

blood and was diagnosed with cirrhosis of the liver and autoimmune issues, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

47. Plaintiff John Levy is a resident of Berkeley County, West Virginia. As a result of Mr. Levy's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Levy has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Levy developed kidney cancer and autoimmune disorder, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

48. Plaintiff William Luther is a resident of Berkeley County, West Virginia. As a result of Mr. Luther's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Luther has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Luther developed bladder cancer and esophagus cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

49. Plaintiff Rosemary Lynch is a resident of Berkeley County, West Virginia. As a result of Ms. Lynch's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Lynch has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with breast cancer, hypothyroidism, and celiac disease and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

50. Plaintiff Malisa Butler is a resident of Berkeley County, West Virginia. As a result of Ms. Butler's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking

water supply, Ms. Butler has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with autoimmune diabetes, eclampsia during pregnancy, and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone and kidney cancer.

51. Plaintiff Marcus Hilliard is a resident of Berkeley County, West Virginia. As a result of Mr. Hilliard's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Hilliard has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Hilliard developed fertility issues and gynecomastia (male breasts), and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

52. Plaintiff Margaret Grabill is a resident of Berkeley County, West Virginia. As a result of Ms. Grabill's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Grabill has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with sarcoidosis, autoimmune disorders, and fertility and pregnancy issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

53. Plaintiff Amber McLeod is a resident of Berkeley County, West Virginia. As a result of Ms. McLeod's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. McLeod has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with high cholesterol, hypertension, blood pressure issues, and an auto-immune disorder and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.



54. Plaintiff Darlene Melvin is a resident of Berkeley County, West Virginia. As a result of Ms. Melvin's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Melvin has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with rectal cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

55. Plaintiff Gary Melvin is a resident of Berkeley County, West Virginia. As a result of Mr. Melvin's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Melvin has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Melvin developed hyperthyroidism, Hashimotos, arthritis, hypertension, and diabetes and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

56. Plaintiff Stephanie Mongan is a resident of Berkeley County, West Virginia. As a result of Ms. Mongan's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Mongan has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with breast cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

57. Plaintiff Patrick Moran is a resident of Berkeley County, West Virginia. As a result of Mr. Moran's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Moran has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Moran developed male breast cancer and cancerous polyps in his colon and is at increased risk of

developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormones and kidney cancer.

58. Plaintiff Morgan McCardell is a resident of Berkeley County, West Virginia. As a result of Ms. McCardell's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. McCardell has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with rheumatoid arthritis, Chron's disease, fertility issues, and pre-eclampsia and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone and kidney cancer.

59. Plaintiff Roberta Neizer is a resident of Berkeley County, West Virginia. As a result of Ms. Neizer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Neizer has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with pregnancy induced hypertension, rheumatoid arthritis, thyroid nodules, and Lupus and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone and kidney cancer.

60. Plaintiff Charles Pinckney is a resident of Berkeley County, West Virginia. As a result of Mr. Pinckney's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Pinckney has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Pinckney developed bladder cancer and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

61. Plaintiff Laura Putman is a resident of Berkeley County, West Virginia. As a result of Ms. Putman's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Putman has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with nodules on her thyroid and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

62. Plaintiff Vicki Rich is a resident of Berkeley County, West Virginia. As a result of Ms. Rich's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Rich has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with thyroid cancer and fertility issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

63. Plaintiff Victoria Rittiner is a resident of Berkeley County, West Virginia. As a result of Ms. Rittiner's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Rittiner has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with osteoarthritis, hypertension, and tumors on her thyroid and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

64. Plaintiff Sheila Robison is a resident of Berkeley County, West Virginia. As a result of Ms. Robison's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Robison has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with hypertension and nodules on her thyroid and is at increased risk of

developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

65. Plaintiff Tony Robison is a resident of Berkeley County, West Virginia. As a result of Mr. Robison's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Robison has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Robison developed prostate cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

66. Plaintiff Shacole Rolle is a resident of Washington County, Maryland. As a result of Ms. Rolle's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Ms. Rolle has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with breast cancer, thyroid issues, and hypertension and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

67. Plaintiff Linda Schmidt is a resident of Berkeley County, West Virginia. As a result of Ms. Schmidt's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Schmidt has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with breast cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

68. Plaintiff Garland See is a resident of Berkeley County, West Virginia. As a result of Mr. See's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. See has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. See

developed hypertension, high cholesterol, prostate cancer, and bladder cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

69. Plaintiff Carl Shaffer is a resident of Berkeley County, West Virginia. As a result of Mr. Shaffer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Shaffer has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Shaffer developed rheumatoid arthritis, high cholesterol, and thyroid issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

70. Plaintiff Paul Shelton is a resident of Berkeley County, West Virginia. As a result of Mr. Shelton's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Shelton has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Shelton developed hyperthyroidism and hypertension and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

71. Plaintiff Penny Shelton is a resident of Berkeley County, West Virginia. As a result of Ms. Shelton's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Shelton has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with hyperthyroidism and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

72. Plaintiff Michelle Smith is a resident of Berkeley County, West Virginia. As a result of Ms. Smith's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Smith has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with Hashimotos, thyroid issues, hyperthyroidism, and pregnancy issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

73. Plaintiff Mark Smithmeyer is a resident of Berkeley County, West Virginia. As a result of Mr. Smithmeyer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Smithmeyer has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Smithmeyer developed high cholesterol and increased uric acid levels and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

74. Plaintiff Irwin Snow is a resident of Berkeley County, West Virginia. As a result of Mr. Snow's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Snow has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Snow developed prostate cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

75. Plaintiff Shannon Spiker is a resident of Berkeley County, West Virginia. As a result of Ms. Spiker's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Spiker has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with triple negative breast cancer and is at increased risk of developing several health

conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

76. Plaintiff John Statmat is a resident of Berkeley County, West Virginia. As a result of Mr. Statmat's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Statmat has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Statmat developed prostate cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

77. Plaintiff Gary Stanley is a resident of Berkeley County, West Virginia. As a result of Mr. Stanley's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Stanley has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Stanley developed high blood pressure and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

78. Plaintiff Stephanie Kemper-Webb is a resident of Berkeley County, West Virginia. As a result of Ms. Kemper-Webb's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Kemper-Webb has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with pregnancy issues and thyroid issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

79. Plaintiff Jonathan Taylor is a resident of Berkeley County, West Virginia. As a result of Mr. Taylor's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Taylor has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr.

Taylor developed pancreatic cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

80. Plaintiff Tena Ware is a resident of Berkeley County, West Virginia. As a result of Ms. Ware's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Ware has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with Synovial sarcoma, thyroid issues, and hypertension, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

81. Plaintiff Amanda Trevino is a resident of Berkeley County, West Virginia. As a result of Ms. Trevino's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Trevino has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with hypothyroidism and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

82. Plaintiff Anne Walsh is a resident of Berkeley County, West Virginia. As a result of Ms. Walsh's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Walsh has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with breast cancer and sarcoidosis, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

83. Plaintiff Joann Watkins is a resident of Jefferson County, West Virginia. As a result of Ms. Watkins's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking



water supply in Martinsburg, Ms. Watkins has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with hypothyroidism, hypertension, and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

84. Plaintiff Tena Ware is a resident of Berkeley County, West Virginia. As a result of Ms. Ware's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Ware has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with synovial sarcoma, thyroid issues, and hypertension, and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

85. Plaintiff Mark Wetzel is a resident of Berkeley County, West Virginia. As a result of Mr. Wetzel's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Wetzel has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Wetzel developed thyroid issues and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

86. Plaintiff Jennifer Whetzel is a resident of Berkeley County, West Virginia. As a result of Ms. Whetzel's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Whetzel has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with blood and bone marrow cancer, uterine cancer, colon cancer, and adrenal gland cancer and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone and kidney cancer.

87. Plaintiff Deanna Widmeyer is a resident of Berkeley County, West Virginia. As a result of Ms. Widmeyer's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Widmeyer has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with thyroid nodules, pregnancy issues, and pre-eclampsia and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

88. Plaintiff Roberta Wilson is a resident of Hampshire County, West Virginia. As a result of Ms. Wilson's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Ms. Wilson has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with hyperthyroidism, nodules on her thyroid, high cholesterol, osteoarthritis, and fertility issues and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

89. Plaintiff Roy Wilson is a resident of Hampshire County, West Virginia. As a result of Mr. Wilson's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply in Martinsburg, Mr. Wilson has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Wilson developed thyroid nodules and high cholesterol and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

90. Plaintiff Bernard Wolfe is a resident of Berkeley County, West Virginia. As a result of Mr. Wolfe's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Wolfe has elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Wolfe developed bladder cancer, hypertension, and high cholesterol and is at increased risk of

developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, testicular cancer, changes in thyroid hormone, and kidney cancer.

91. Plaintiff Caroline Zdziera is a resident of Clarke County, Virginia. As a result of Ms. Zdziera's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Ms. Zdziera has elevated levels of PFOA, PFOS, and/or PFCs in her blood and was diagnosed with pancreatic cancer, thyroid issues, and osteoarthritis and is at increased risk of developing several health conditions, including but not limited to ulcerative colitis, effects on the liver and immune system, changes in thyroid hormone, and kidney cancer.

92. Plaintiff Susan Files, on behalf of the Estate of Marvin Hess, is a resident of Berkeley County, West Virginia, as was her son, Marvin. As a result of Mr. Hess's exposure to elevated levels of PFOA, PFOS, and/or PFCs in the drinking water supply, Mr. Hess had elevated levels of PFOA, PFOS, and/or PFCs in his blood. Mr. Hess developed a rare form of kidney cancer and died 18 months later at the age of 44.

93. Defendant, 3M Company, f/k/a Minnesota Mining and Manufacturing Company, ("3M"), is a Delaware corporation doing business throughout the United States, including conducting business in West Virginia. 3M has its principal place of business at 3M Center, St. Paul, Minnesota 55133.

94. 3M designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs' blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

95. Defendant Tyco Fire Products, L.P., successor in interest to The Ansul Company (“Tyco”), is a Delaware corporation doing business throughout the United States, including conducting business in West Virginia. Tyco has its principal place of business at One Stanton Street, Marinette, Wisconsin 54143. Tyco manufactured and currently manufactures the Ansul brand of products, including Ansul brand AFFF containing PFAS.

96. Tyco is the successor in interest to the corporation formerly known as The Ansul Company (“Ansul”). At all times relevant, Tyco/Ansul designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs’ blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs’ blood and/or bodies.

97. Defendant Buckeye Fire Equipment Company (“Buckeye”) is a North Carolina corporation doing business throughout the United States, including conducting business in West Virginia. Buckeye has its principal place of business at 110 Kings Road, Mountain, North Carolina 28086.

98. Buckeye designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs’ blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs’ blood and/or bodies.

99. Defendant Chemguard is a Wisconsin corporation doing business throughout the United States, including conducting business in West Virginia. Chemguard has its principal place of business at One Stanton Street, Marinette, Wisconsin 54143.

100. Chemguard designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs' blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

101. Defendant National Foam, Inc. ("National Foam") is a Delaware corporation doing business throughout the United States, including conducting business in West Virginia. National Foam has its principal place of business at 350 East Union Street, West Chester, Pennsylvania 19382.

102. National Foam designed, marketed, developed, manufactured, distributed released, trained users, produced instructional materials, sold and/or otherwise handled and/or used AFFF containing PFAS that are used in firefighting training and response exercises which are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs' blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

103. Defendant, E. I. du Pont de Nemours & Co. ("DuPont"), is a Delaware corporation doing business throughout the United States, including conducting business in West Virginia. DuPont has its principal place of business at 1007 Market Street, Wilmington, Delaware 19898.

104. DuPont designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, including in West Virginia, in such a way as to result in the contamination of Plaintiffs' blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

105. Defendant, The Chemours Company, L.L.C. ("Chemours"), is a Delaware corporation doing business throughout the United States, including conducting business in West Virginia. Chemours has its principal place of business 1007 Market Street, Wilmington, Delaware 19898.

106. Chemours designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled and/or used AFFF containing PFAS that are the subject of this Complaint, in such a way as to result in the contamination of Plaintiffs' blood and/or bodies with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

107. When reference is made in this Complaint to any act or omission of any of the Defendants, it shall be deemed that the officers, directors, agents, employees, or representatives of the Defendants committed or authorized such act or omission, or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation, or control of the affairs of Defendants, and did so while acting within the scope of their duties, employment or agency.

108. The term "Defendant" or "Defendants" refers to all Defendants named herein jointly and severally.

### **GENERAL FACTUAL ALLEGATIONS**

109. AFFF is a mixture of chemicals, including PFAS, used to put out petroleum-based fuel and other flammable liquid fires. AFFF lowers surface tension of the fuel, which starves a fire of its oxygen supply. While the fluorinated compounds in AFFF work well to extinguish fires, they are not biodegradable. These toxic chemicals accumulate and contaminate the bodies of animals and humans who come in contact with or consume them.

110. Defendants designed, marketed, developed, manufactured, distributed, released, trained users, produced instructional materials, sold, and/or otherwise handled AFFF containing toxic PFAS that were used at hundreds of military bases around the country, including the Air National Guard Base in Martinsburg, West Virginia.

111. Defendants have each designed, marketed, developed, distributed, sold, manufactured, released, trained users on, produced instructional materials for, and/or otherwise handled and/or used AFFF containing PFAS, including in West Virginia, in such a way as to cause the contamination of Plaintiffs' blood and/or bodies with PFAS and the resultant biopersistence and bioaccumulation of such PFAS in the blood and/or bodies of Plaintiffs.

112. Prior to commercial development and large-scale manufacture and use of AFFF containing PFAS, no such PFAS had been found, detected, or were present in human blood.

113. By at least the end of the 1960s, animal toxicity testing performed by Defendants manufacturing and/or using PFAS indicated that exposure to such materials, including at least PFOA, resulted in various adverse health effects among multiple species of laboratory animals, including toxic effects to the liver, testes, adrenals, and other organs and bodily systems.

114. By at least the end of the 1960s, additional research and testing performed by Defendants manufacturing and/or using PFAS indicated that such materials, including at least

PFOA, because of their unique chemical structure, were resistant to environmental degradation and would persist in the environment essentially unaltered if allowed to enter the environment.

115. By at least the end of the 1970s, additional research and testing performed by Defendants manufacturing and/or using PFAS indicated that one or more such materials, including at least PFOA and PFOS, because of their unique chemical structure, would bind to proteins in the blood of animals and humans exposed to such materials where such materials would not only remain over long periods of time but would accumulate and build up in the blood/body of the exposed individuals with each additional exposure, no matter how small.

116. Defendants manufacturing and/or using AFFF containing PFAS released such PFAS into the environment during, as a result of, or in connection with their manufacturing and other commercial operations, including into the air, surface waters, groundwater, soils, and/or landfills, and/or through their involvement and/or participation in the creation of consumer or other commercial products and materials and related training and response and instructional materials and activities, including in West Virginia, that Defendants knew, foresaw, and/or reasonably should have known and/or foreseen would expose West Virginia residents to such PFAS.

117. By at least the end of the 1970s, Defendants manufacturing and/or using PFAS, including at least DuPont and 3M, were aware that PFAS, including at least PFOA and PFOS, had been detected not only in the blood of workers at PFAS manufacturing facilities, but in the blood of the general population of the United States in people not known to be working at or living near PFAS manufacturing and/or use facilities, indicating to such Defendants that continued manufacture and use of such PFAS materials would inevitably result in continued and increased levels of PFAS getting into the environment and into human blood across the United



States, even in areas nowhere near or associated with specific PFAS manufacturing or use facilities.

118. By at least the end of the 1980s, additional research and testing performed by Defendants manufacturing and/or using PFAS indicated that at least one such PFAS, PFOA, had caused Leydig cell (testicular) tumors in a chronic cancer study in rats, resulting in at least one such Defendant, DuPont, classifying such PFAS internally as a confirmed animal carcinogen and possible human carcinogen.

119. It was understood by Defendants by at least the end of the 1980s that a chemical that caused cancer in animal studies must be presumed to present a cancer risk to humans, unless the precise mechanism of action by which the tumors were caused was known and it was known that such mechanism of action would not be operative and/or occur in humans.

120. By at least the end of the 1980s, scientists had not determined the precise mechanism of action by which any PFAS caused tumors. Therefore, prevailing scientific principles of carcinogenesis classification mandated that Defendants presume any such PFAS material that caused tumors in animal studies could present a potential cancer risk to exposed humans.

121. By at least the end of the 1980s, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least DuPont, indicated that elevated incidence of certain cancers and other adverse health effects, including elevated liver enzymes and birth defects, had been observed among workers exposed to such materials, including at least PFOA, but such data was not published, provided to governmental entities as required by law, or otherwise publicly disclosed at the time.

122. By at least the end of the 1980s, Defendants, including at least 3M and DuPont, understood that, not only did these PFAS, including at least PFOA and PFOS, get into and persist and accumulate in human blood and in the human body, but that once in the human body and blood, particularly the longer-chain PFAS, such as PFOS and PFOA, had a long half-life, meaning that they would take a very long time (years) before even half of the material would start to be eliminated (assuming no further exposures), which allowed increasing levels of the chemicals to build up and accumulate in the blood and/or body of exposed individuals over time, particularly if any level of exposures continued.

123. By at least the end of the 1990s, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least 3M and DuPont, indicated that at least one such PFAS, PFOA, had caused a triad of tumors (Leydig cell (testicular), liver, and pancreatic) in a second chronic cancer study in rats.

124. By at least the end of the 1990s, the precise mechanism(s) of action by which any PFAS caused each of the tumors found in animal studies had still not been identified, mandating that Defendants continue to presume that any such PFAS that caused such tumors in animal studies could present a potential cancer risk to exposed humans.

125. By at least 2010, additional research and testing performed by Defendants manufacturing and/or using PFAS, including at least 3M and DuPont, revealed multiple potential adverse health impacts among workers exposed to such PFAS, including at least PFOA, such as increased cancer incidence, hormone changes, lipid changes, and thyroid and liver impacts, which Defendants' own scientists, lawyers, and advisors recommended be studied further to assess the extent to which PFAS exposures were causing those effects.

126. When the United States Environmental Protection Agency (“USEPA”) and other state and local public health agencies and officials first began learning of PFAS exposures in the United States and potential associated adverse health effects, Defendants repeatedly assured and represented to such entities and the public that such exposures presented no risk of harm and were of no legal, toxicological, or medical significance of any kind.

127. After USEPA and other entities began asking Defendants to stop manufacturing and/or using certain PFAS, Defendants began manufacturing and/or using and/or began making and/or using more of certain other and/or “new” PFAS, including PFAS materials with six or fewer carbons, such as GenX (collectively “Short-Chain PFAS”).

128. Defendants manufacturing and/or using Short-Chain PFAS, including at least DuPont and 3M, are aware that one or more such Short-Chain PFAS materials have also been found in human blood.

129. By at least the mid-2010s, Defendants, including at least DuPont and Chemours, were aware that at least one Short-Chain PFAS had been found to cause the same triad of tumors (Leydig (testicular), liver, and pancreatic) in a chronic rat cancer study as had been found in a chronic rat cancer study with a non-Short-Chain PFAS.

130. As of today’s date, the precise mechanism(s) of action by which any PFAS causes each of the tumors found in animal studies has(ve) not been identified, mandating that Defendants presume that any such PFAS that caused such tumors in animal studies be presumed to present a potential cancer risk to exposed humans.

131. Research and testing performed by and/or on behalf of Defendants making and/or using Short-Chain PFAS indicates that such Short-Chain PFAS materials present the same,

similar, and/or additional risks to human health as had been found in research on other PFAS materials, including cancer risk.

132. Nevertheless, Defendants repeatedly assured and represented to governmental entities and the public (and continue to do so) that the presence of PFAS, including these Short-Chain PFAS, in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.

133. As of today's date, Defendants, through their membership in the **FluoroCouncil**, represent to the public through the FluoroCouncil website that: "The newer, short-chain chemistries currently in use are well studied [and] ... [t]he science supports the conclusion that the newer FluoroTechnology is not expected to present a significant risk to humans and the environment."

134. At all relevant times, Defendants, individually and/or collectively, have had the resources and ability to fund or sponsor any study, investigation, testing and/or research into the impact of PFAS on human health. However, the Defendants have intentionally, purposefully, recklessly, and/or negligently chosen not to fund or sponsor any study, investigation, testing, and/or other research of any kind of the nature Defendants claim is necessary to confirm and/or prove that the presence of any one and/or combination of PFAS in human blood causes any disease and/or adverse health impact of any kind in humans, presents any risk of harm to humans, and/or is of any legal, toxicological, or medical significance to humans, according to standards Defendants deem acceptable.

135. Even after an independent science panel, known as the "C8 Science Panel," publicly announced in the 2010s that human exposure to 0.05 parts per billion or more of one PFAS or PFOA, in drinking water for one year or more had "probable links" with certain human

diseases, including kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, preeclampsia, and medically-diagnosed high cholesterol, Defendants repeatedly assured and represented to governmental entities, their customers, and the public (and continue to do so) that the presence of PFAS in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind, and have represented to and assured such governmental entities, their customers, and the public (and continue to do so) that the work of the independent C8 Science Panel was inadequate to satisfy the standards of Defendants to prove such adverse effects upon and/or any risk to humans with respect to PFAS in human blood.

136. At all relevant times, Defendants shared and/or should have shared among themselves all relevant information relating to the presence, biopersistence, and bioaccumulation of PFAS in human blood and associated toxicological, epidemiological, and/or other adverse effects and/or risks.

137. As of the present date, blood serum testing and analysis by Defendants, independent scientific researchers, and/or government entities has confirmed that PFAS materials are clinically demonstrably present in approximately 99% of the current population of the United States.

138. There is no naturally-occurring “background,” normal, and/or acceptable level or rate of any PFAS in human blood, as all PFAS detected and/or present in human blood is present and/or detectable in such blood as a direct and proximate result of the acts and/or omissions of Defendants.

139. Data exists to indicate that the presence, accumulation, toxic invasion, and/or persistence of PFAS in human blood, including that of Plaintiffs, is injurious and physically

harmful and results in unwanted, unconsented-to, and deleterious alterations, changes, and/or other presently-existing physical injury and/or adverse impacts to the blood and/or bodies of Plaintiffs, including but not limited to subcellular injuries, biopersistence and bioaccumulation within the body.

140. At all relevant times, Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood and any alleged adverse impacts and/or risks associated therewith, effectively preventing Plaintiffs from discovering the existence and extent of any injuries/harm as alleged herein.

141. At all relevant times, Defendants, through their acts and/or omissions, took steps to attack, challenge, discredit, and/or otherwise undermine any scientific studies, findings, statements, and/or other information that proposed, alleged, suggested, or even implied any potential adverse health effects or risks and/or any other fact of any legal, toxicological, or medical significance associated with the presence of PFAS in human blood.

142. At all relevant times, Defendants, through their acts and/or omissions, concealed and/or withheld information from their customers, governmental entities, and the public that would have properly and fully alerted Plaintiffs to the legal, toxicological, medical, or other significance and/or risk from having any PFAS material in Plaintiffs' blood.

143. At all relevant times, Defendants encouraged the continued and even further increased use and release into the environment of PFAS, including into West Virginia, by their customers and others, including but not limited to through manufacture, use, and release, of AFFF containing PFAS and/or emergency responder protection gear or equipment coated with

materials made with or containing PFAS, and tried to encourage and foster the increased and further use of PFAS, including in West Virginia, in connection with as many products/uses/and applications as possible, despite knowledge of the toxicity, persistence, and bioaccumulation concerns associated with such activities.

144. Once governmental entities and regulators began learning of the potential toxicity, persistence, and bioaccumulation concerns associated with PFAS, Defendants cited to the pervasive use of such PFAS throughout numerous sectors of the American economy (which they had intentionally and purposefully encouraged and created) and the widespread presence of PFAS in blood of Americans (which they also had negligently, recklessly, and/or intentionally caused) as an excuse and/or reason not to restrict or regulate PFAS, essentially arguing that the issues associated with PFAS had become “too big to regulate.”

145. To this day, Defendants deny that the presence of any PFAS in human blood, at any level, is an injury or presents any harm or risk of harm of any kind, or is otherwise of any legal, toxicological, or medical significance.

146. To this day, Defendants deny that any scientific study, research, testing, or other work of any kind has been performed that is sufficient to suggest to the public that the presence of any PFAS material in human blood, at any level, is of any legal, toxicological, medical, or other significance.

147. Defendants, to this day, affirmatively assert and represent to governmental entities, their customers, and the public that there is no evidence that any of the PFAS found in human blood across the United States causes any health impacts or is sufficient to generate an increased risk of future disease sufficient to warrant diagnostic medical testing, often referring to

existing studies or data as including too few participants or too few cases or incidents of disease to draw any scientifically credible or statistically significant conclusions.

148. Defendants, to this day, use and rely upon what they claim is this same “lack of definitive evidence of causation” as between any PFAS and any adverse human health effect to oppose and try to discourage regulatory and/or legislative efforts to limit, restrict, and/or address PFAS impacts to the environment or human health, and to oppose, reject, and deny claims that PFAS has caused any injury or increased the risk of any adverse human health effects.

149. Yet, to this day, Defendants knowingly, willfully, purposefully, intentionally, recklessly, and/or negligently refuse to fund or conduct any scientific study, research, testing, and/or other work of any kind that is extensive or comprehensive enough, according to Defendants, to generate results that Defendants will accept (outside the context of an existing written settlement agreements, such as the one DuPont entered with respect to certain PFOA exposures, which created the C8 Science Panel) as sufficient to confirm a causal connection between any single or combination of PFAS in human blood and any injury, human disease, adverse human health impact, and/or a risk sufficient to warrant any personal injury compensation or future diagnostic medical testing, including medical monitoring.

150. Defendants were and/or should have been aware, knew and/or should have known, and/or foresaw or should have foreseen that their marketing, development, manufacture, distribution, release, training and response of users, production of instructional materials, sale and/or other handling and/or use of AFFF containing PFAS, including in West Virginia, would result in the contamination of the blood and/or body of individuals including Plaintiffs with PFAS, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs’ blood and/or bodies.



151. Defendants were and /or should have been aware, or knew and/or should have known, and/or foresaw or should have foreseen that allowing PFAS to contaminate the blood and/or bodies of Plaintiffs would cause injury, irreparable harm, and/or unacceptable risk of such injury and/or irreparable harm to Plaintiffs.

152. Defendants did not seek or obtain permission or consent from Plaintiffs before engaging in such acts and/or omissions that caused, allowed, and/or otherwise resulted in Plaintiffs' exposure to AFFF and the contamination of Plaintiffs' blood and/or bodies with PFAS materials, and resulting biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

### **Contamination in The City of Martinsburg**

153. For decades, the United States Air Force and Air National Guard has stored and used AFFF containing PFAS in firefighter training and response exercises at the 167th Air Wing at Shepherd Field Air National Guard Base ("167th AW") in Martinsburg, West Virginia. The AFFF containing PFAS, which was designed, manufactured, marketed, distributed and/or sold by Defendants, was expected to, and did, reach the Shepherd Field Air National Guard Base in Martinsburg, West Virginia, without substantial change in the condition in which it was sold to the Air Force.

154. The descriptive labels and data sheets for the AFFF containing PFAS utilized at the 167th AW Base in Martinsburg, West Virginia, did not reasonably or adequately describe the hazards of AFFF containing PFAS. Defendants knew or should have known of these hazards when the product was distributed. Defendants manufactured, designed, marketed, distributed, and/or sold the AFFF knowing that the PFAS contained in the AFFF presented an unreasonable risk to human health and are inherently dangerous.

155. The Big Springs Water Filtration Plant is one of two main sources of drinking water for the City of Martinsburg's municipal water system and is nearby and downgradient of the Shepherd Air National Guard Base which is part of the Eastern Regional Airport in Martinsburg, West Virginia.

156. These sites have been linked to the contamination of surface and groundwater with PFOA, PFOS, and other perfluorinated chemicals ("PFCs"). On the base itself, ten (10) "Areas of Concern" were identified by military and state officials as being the most likely sources of contamination.

157. PFOA has been detected in levels exceeding the current EPA Health Advisory Limit of 70 parts per trillion (ppt) in the City of Martinsburg and aquifer that provides water to communities through both municipal water systems and private wells.

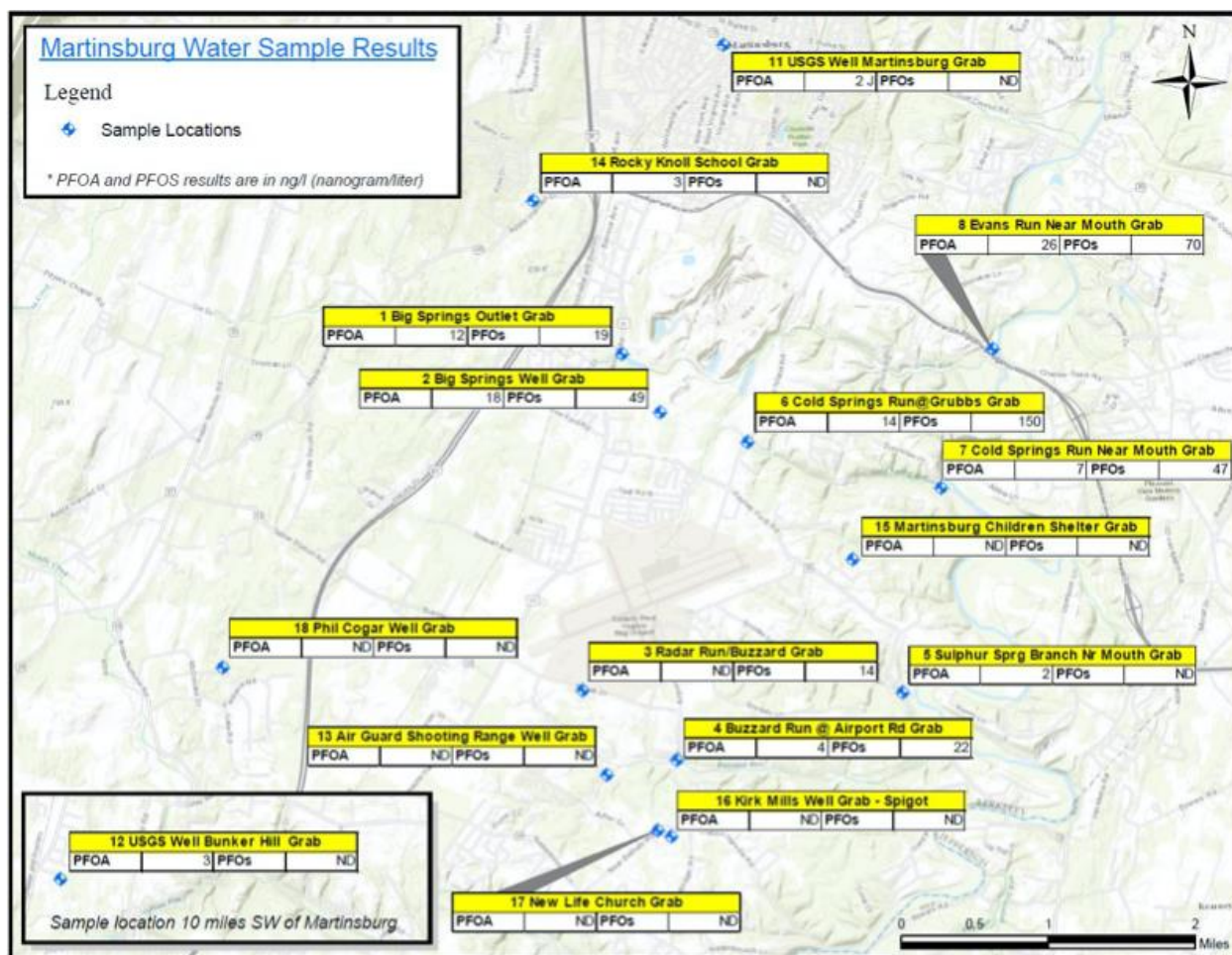
158. Monitoring conducted in 2014 by the City of Martinsburg, pursuant to EPA's Unregulated Contaminant Monitoring Rule, revealed detections of PFOS in the filtration plant's Big Springs Deep Well, but at levels below the then current EPA recommended thresholds. When EPA updated the PFOS/PFOA thresholds in May 2016, these prior detections became problematic, and the West Virginia Bureau for Public Health advised the deep well's use to be discontinued. The West Virginia Department of Environmental Protection's Division of Water and Waste Management ("DWWM") then began investigating the source of PFOS contamination in Martinsburg's deep well.

159. DWWM geologists and hydrologists researched available geologic publications and spoke with U.S. Geological Survey staff who had actively studied the areas groundwater hydrology.

160. On June 1 and 2, 2016, DWWM staff mobilized and sampled water from 9 wells, 1 spring, and 6 stream locations. Samples were analyzed by Eurofins-Lancaster Laboratories in Lancaster, PA. The lab is certified by the WVDEP Laboratory Certification Program for Perfluorinated Compounds Analysis.

161. The sampling strategy was to sample both wells and streams in the perimeter surrounding the Big Springs Well, looking for hotspots, keeping in mind four possible sources of PFOS contamination. The four possible sources identified during the investigation were a large tire fire near Inwood, WV, a truck wreck and fire near I-81, the historic textile industry in Martinsburg, and the 167th Air Guard facility.

162. Sampling results are shown on the figure below, in general terms PFOS/PFOA was found at the highest concentrations in Cold Springs Run (6 and 7), Evans Run (8) and the Big Springs Well (2).



163. While sampling was being conducted, DWWM staff also met with 167th Air Guard Base personnel. Base personnel provided a report titled *Perfluorinated Compounds Preliminary Assessment, Site Visit Report, December 2015* which detailed historic use of PFOS at the 167th Base.

164. Importantly, two areas of the report stood out. One was a former fire training pit on the Base which had been previously remediated for traditional organic compounds. The second was at Hangar 119, Hangar 128, and Hangar 110 where both spills of Aqueous Film Forming Foams (AFFF) and periodic fire suppression system testings reportedly occurred. Hangars discharged through an oil-water separator into Cold Springs Run. Given the high

solubility of the PFOS and PFOA family of compounds, little if any treatment would be expected from the oil-water separator prior to its discharge into Cold Springs Run.

165. Specific to the fire training pit, the report stated on pages 3 and 4:

IRP Site 4 was an open, gravel-bottomed, elliptical bermed pit, located north of Taxiway A. Flammable liquids were poured into the pit and were ignited for fire-training exercises. The pit measured approximately 20 by 30 feet and was lined with several layers of thick plastic sheeting that degraded over time. Approximately 75 feet north of the pit, the ground slopes steeply toward a man-made drainage ditch. Water that accumulated in the pit was sometimes drained from the pit into the nearby drainage ditch. The remedial action, including excavation, on-site thermal treatment of contamination, and confirmation monitoring, was completed in 1996, and it was determined that contaminant levels at the site posed negligible risk to public health and the environment. The West Virginia Department of Environmental Protection reviewed the sampling results which confirmed that all contaminant levels were below target clean up levels, and determined that no further action was required (AMEC, 2002). However, PFCs were not contaminants of concern during IRP investigations. As such, soil and/or groundwater samples were not analyzed for PFCs.

166. Specific to Hangars 119, 128, and 110 the report stated:



### *3.1.1 Hangar 119*

Hangar 119 was constructed in the 1960s and was equipped with an AFFF fire suppression system from approximately 1989 until 2007. The suppression system was designed to contain, store, and in the case of system engagement, ultimately discharge the AFFF inside the hangar.

In 2007, Hangar 119 was converted to house various functions such as Civil Engineering (CE) and Environmental Management and the AFFF fire suppression system was removed. AFFF from the 2007 removal was turned in to the Defense Reutilization and Marketing Office (DRMO) and sent to Battle Creek, Michigan.

One spill was reported while the system was in place. The spill occurred in the 1990s and consisted of an approximate 500-gallon release to the hangar floor. The AFFF was hosed down the sanitary sewer drains which were connected to an oil/water separator (OWS) as was the case with all the hangars at that time. Prior to 2007, the sanitary drains inside Hangar 119 were connected to the Base's wastewater treatment plant (WWTP) which discharged its effluent into the storm water drainage system which flows toward Cold Spring Run. According to Base personnel, sludge from the WWTP was sent off-site to a landfill for disposal and therefore not disposed on Base. The WWTP was demolished in 2007 and the sanitary sewer connected to the City of Martinsburg.

Other Hangar 119 releases of AFFF occurred during fire suppression system tests. It was estimated by Base personnel that an AFFF fire suppression system test took place approximately

every five years. Approximately 100-200 gallons of AFFF was released during each test. As indicated above, prior to 2007, AFFF from system tests was discharged to the Base WWTP (see Section 3.1.12 for additional information on the WWTP).

### ***3.1.2 Former Hangar 128***

The former location of Hangar 128 is shown on Figure 2. The hangar was constructed in the 1980s and was demolished in 2008. Hangar 128 was equipped with an AFFF fire suppression system until decommissioning prior to demolition. The suppression system was designed to contain, store, and in the case of system engagement, ultimately discharge the AFFF inside the hangar. According to CE drawings, the hangar drained to the sanitary sewer which, prior to 2007, was connected to the Base WWTP which discharged to the storm water drainage system.

In the 1990s, approximately 500 gallons of AFFF was released to the hangar floor. The AFFF was hosed down the sanitary sewer drains which were connected to an OWS as was the case with all the hangars at that time. However, prior to 2007 the sanitary sewer drains inside Hangar 119 were connected to the Base's WWTP which discharged its effluent into the storm water drainage system which flows toward Cold Spring Run. The WWTP was demolished in 2007 and the sanitary sewer connected to the City of Martinsburg.

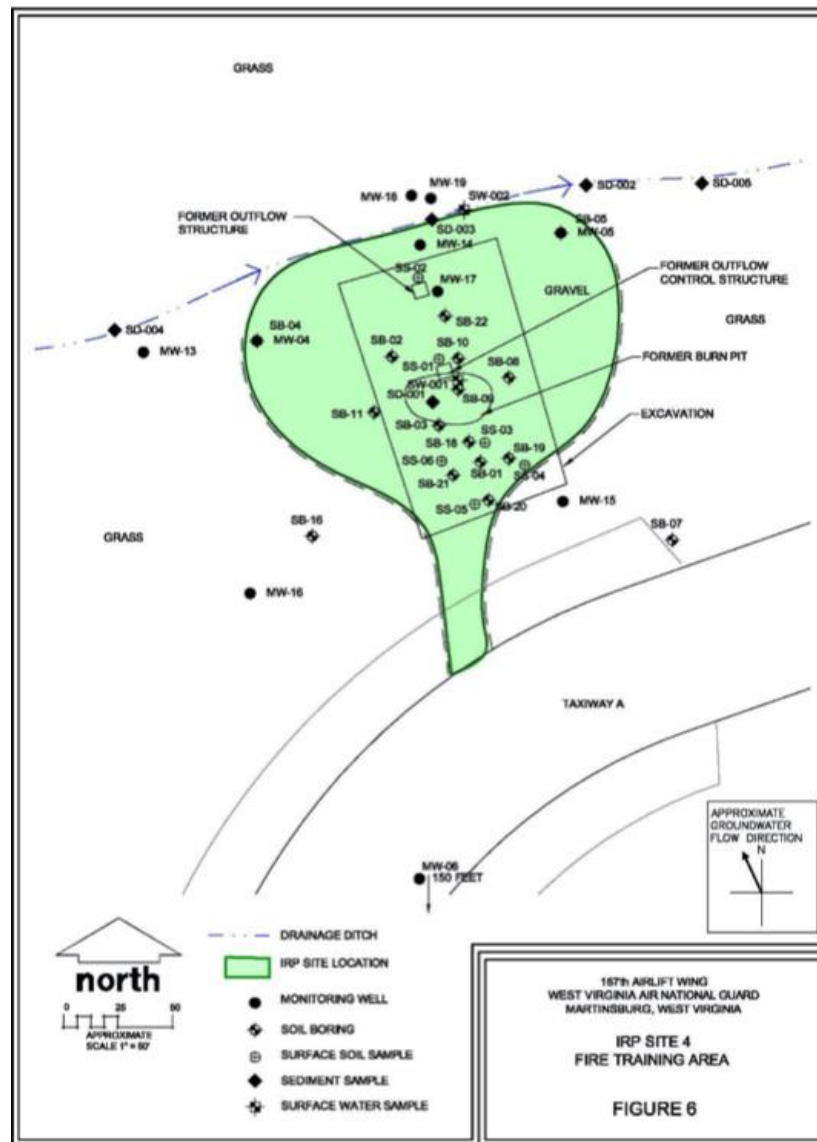
Other Hangar 128 releases of AFFF occurred during fire suppression system tests. It was estimated by Base personnel that an AFFF fire suppression system test took place approximately every five years. Approximately 100-200 gallons of AFFF was released during each test. As indicated above, prior to 2007, AFFF from system tests was discharged to the Base WWTP.

### ***3.1.3 Former Hangar 110***

Building 110 was constructed in the 1950s and demolished in 2011. The building was used as a hangar and was equipped with a AFFF fire suppression system. The installation date for the AFFF fire suppression system is not known; however, the system was decommissioned prior to demolition. As with other buildings at the Base, Hangar 110's floor drains discharged to the sanitary sewer system prior to 2007 when it was connected to the Base WWTP. Effluent from the Base WWTP was discharged to the storm water drainage system. The WWTP was demolished in 2007 and the sanitary sewer connected to the City of Martinsburg.

167. Another interesting excerpt, found in WVDEP files, was from information related to the previous fire training pit remediation, and a depiction of groundwater flow

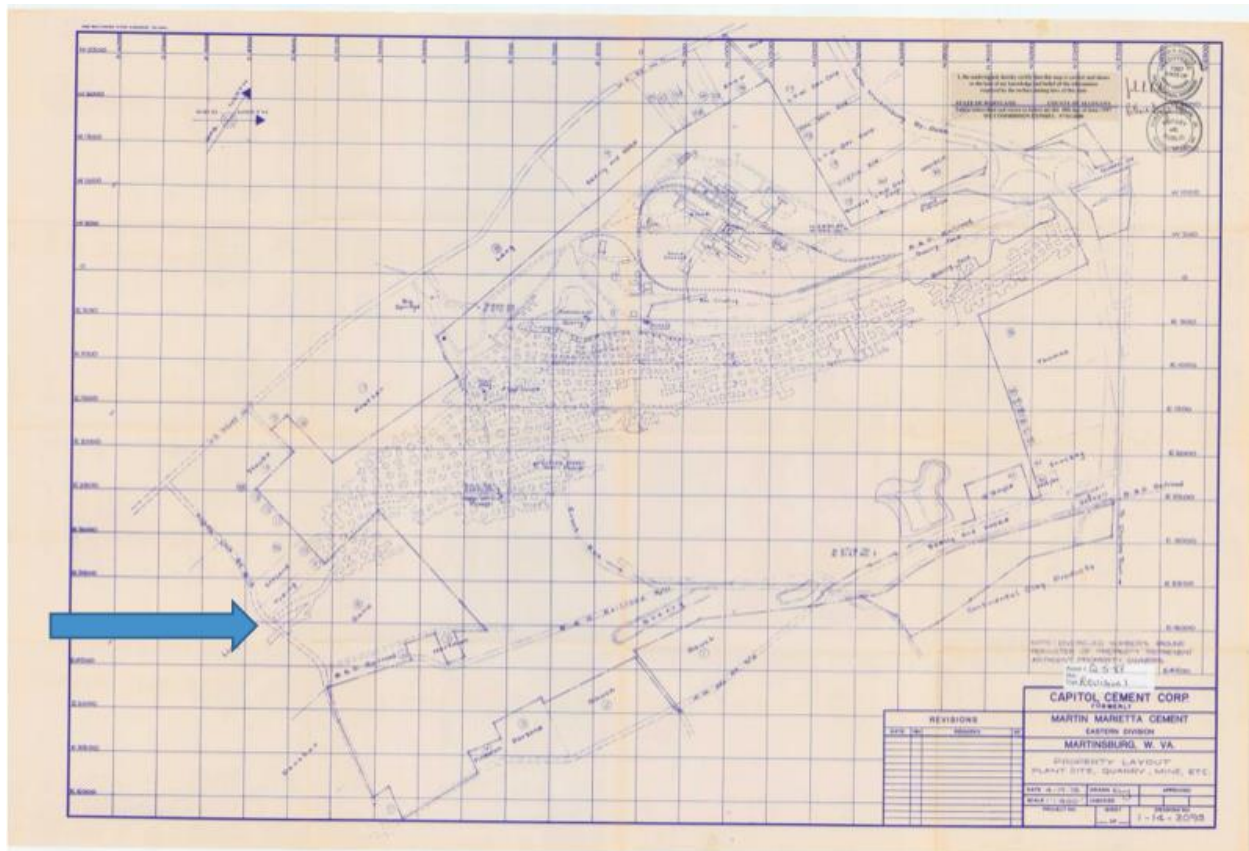
direction. This flow direction is in the general direction of the Big Springs Deep Well. (see Figure 6 below, excerpted from *Final Proposed Plan for Installation Restoration Program, Sites 1 through 4, 167th Airlift Wing, West Virginia Air National Guard, Sheppard Field Air National Guard Base Martinsburg, West Virginia, 2013*).



168. A final consideration relating sampling results to possible PFOS sources is the presence of underground tunnels associated with historic limestone mining at the nearby quarry. While hard to see on the map below, tunnels extend from the existing open pit quarry area,



southwest to a road labeled Fryatt's Lane, Route #19 (now called Paynes Ford road). These tunnels are within ~0.6 miles of the airport runway and are believed to be directly connected to the Big Springs Deep Well.



169. DWWM executed a surface and groundwater sampling strategy designed to encircle the Big Springs Deep Well, using approved analytic methods and with favorable equipment rinse and trip sample blanks. Combining these analyses with available geologic information and information on PFOS usage in the area, the 167th Base is believed to be the largest and most probable source of the PFOS contamination in Martinsburg's Big Springs Deep Well, according to DWWM.

170. Further supporting the DWWM's findings were the following information pieces:

- a. The 167th Base has documented historic use and spills of PFOS onsite;
- b. The 167th Base sits on a topographic high, western portions of it overtop the limestone formation which is quarried to the North;
- c. Groundwater movement along geologic strike can be expected;
- d. There is likely a groundwater cone of depression created by the pumping of the quarry and water supply wells which would tend to pull groundwater from the 167th Base towards the Big Springs Deep Well;
- e. The abandoned quarry tunnels are essentially open conduits to convey groundwater from the 167th Base area into the city's well;
- f. PFOS was not detected in any appreciable levels in other areas sampled;
- g. Essroc Quarry personnel stated they have never used PFAA compounds.

#### **Contamination of Plaintiffs**

171. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

172. Many parties have studied PFOA and PFOS and have concluded that exposure to PFOA and PFOS is associated with the development of numerous serious medical conditions.

173. PFOA, sometimes identified as C8 due to the common presence of eight carbons in the PFOA molecule, was the subject of a study formed out of a class action settlement arising out of water contamination from DuPont's Washington Works located in Wood County, West Virginia.

174. The C8 Science Panel consisted of three epidemiologists specifically tasked with determining whether there was a link between PFOA exposure and human diseases.

175. In 2012, the Panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy induced hypertension (including pre-eclampsia), and hypercholesterolemia.

176. Years of ingestion and dermal absorption of contaminated water from the Big Springs Water Filtration Plant have exposed unknowing residents of Martinsburg to PFC's at concentrations hazardous to their health.

177. Plaintiffs have been injured as a result of receiving water with elevated levels of PFC's, including PFOA and PFOS.

178. Plaintiffs have suffered exposure, personal injury, bioaccumulation of PFCs in their blood, property damage, and the diminution of property values due to PFC contamination of the municipal and private water supplies caused by Defendants' manufacture, distribution, and sale of AFFF.

179. The property of the Plaintiffs has been damaged due to the presence of PFC's in their homes, soil, surrounding property, and potable water supply.

180. Plaintiffs seek recovery from all Defendants for injuries, damages, and losses suffered by the Plaintiffs, each of whom suffered injuries as a direct and proximate result of exposure to and consumption of PFC-contaminated water from the municipal and private drinking water supplies, in an amount to be determined at trial, exclusive of interests, costs, and attorney's fees.

## **CAUSES OF ACTION**

### **COUNT I** **Negligence**

181. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

182. Defendants had a duty to exercise reasonable care in their design, engineering, manufacture, development, fabrication, testing, release, training and response of users, production of informational materials, handling, selling, use, and/or distribution of the inherently

dangerous AFFF containing PFAS, including a duty of care to ensure that PFAS did not infiltrate, persist in, and accumulate in Plaintiffs' blood and/or bodies.

183. Defendants owed a duty of care towards Plaintiffs that was commensurate with the inherently dangerous, harmful, injurious, bio-persistent, environmentally-persistent, toxic, and bio-accumulative nature of PFAS.

184. Defendants failed to exercise ordinary care by acts and/or omissions that permitted, allowed, and/or otherwise resulted in the contamination of, persistence in, and accumulation in Plaintiffs' blood and/or bodies with one or more PFAS, including all such acts and/or omissions referenced in this Complaint, resulting in one or more PFAS in the Plaintiffs' blood.

185. Defendants knew, foresaw, anticipated, and/or should have foreseen, anticipated, and/or known that the design, engineering, manufacture, fabrication, sale, release, training and response of users, production of informational materials, handling, use, and/or distribution of AFFF containing PFAS and/or other acts and/or omissions as described in this Complaint could contaminate Plaintiffs' water supply, and consequently Plaintiffs' blood and/or bodies and its persistence and accumulation in Plaintiffs' blood and/or bodies.

186. Despite knowing, anticipating, and/or foreseeing the bio-persistent, bio-accumulative, toxic, and/or otherwise harmful and/or injurious nature of AFFF containing PFAS, Defendants, their agents, servants, and/or employees, committed negligent acts and/or omissions that resulted in the contamination of Plaintiffs' blood and/or bodies with one or more PFAS materials, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood and/or bodies.

187. Defendants, through their acts and/or omissions as described in this Complaint, breached their duty to Plaintiffs.

188. It was reasonably foreseeable to Defendants that Plaintiffs would likely suffer the injuries and harm described in this Complaint by virtue of Defendants' breach of their duty and failure to exercise ordinary care, as described herein.

189. But for Defendants' negligent and/ or grossly negligent acts and/or omissions, Plaintiffs would not have been injured or harmed.

190. Defendants' negligent conduct was the direct and proximate cause of the injuries and harm to Plaintiffs, as described above.

**COUNT II**  
**Battery**

191. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

192. At all relevant times, Defendants possessed knowledge that the AFFF containing PFAS which they designed, engineered, manufactured, fabricated, sold, handled, released, trained users on, produced instructional materials for, used, and/or distributed were bio-persistent, bio-accumulative, toxic, potentially carcinogenic, and/or otherwise harmful/injurious and that their continued manufacture, use, sale, handling, release, and distribution would result in West Virginia residents, including Plaintiffs, having PFAS in their blood, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' blood.

193. However, despite possessing such knowledge, Defendants knowingly, purposefully, and/or intentionally continued to engage in such acts and/or omissions, including but not limited to all such acts and/or omissions described in this Complaint, that continued to

result in accumulation of PFAS in Plaintiffs' blood and/or bodies, and such PFAS persisting and accumulating in Plaintiffs' blood and/or bodies.

194. Defendants did not seek or obtain permission or consent from Plaintiffs to put or allow PFAS materials into Plaintiffs' blood and/or bodies, or to persist in and/or accumulate in Plaintiffs' blood and/or bodies.

195. Entry into, persistence in, and accumulation of such PFAS in Plaintiffs' blood and/or bodies without permission or consent is an unlawful and harmful and/or offensive physical invasion and/or contact with Plaintiffs' persons and unreasonably interferes with Plaintiffs' rightful use and possession of Plaintiffs' blood and/or bodies.

196. At all relevant times, the PFAS present in Plaintiffs' blood originated from Defendants' acts and/or omissions.

197. Defendants continue to knowingly, intentionally, and/or purposefully engage in acts and/or omissions that result in the unlawful and unconsented-to physical invasion and/or contact with Plaintiffs that results in persisting and accumulating levels of PFAS in Plaintiffs' blood.

198. Plaintiffs, and any reasonable person, find the contact at issue harmful and/or offensive.

199. Defendants acted intentionally with the knowledge and/or belief that the contact, presence and/or invasion of PFAS with, onto and/or into Plaintiffs' blood serum, including its persistence and accumulation in such serum, was substantially certain to result from those very acts and/or omissions.

200. Defendants' intentional acts and/or omissions resulted directly and/or indirectly in harmful contact with Plaintiffs' blood and/or bodies.

201. The continued presence, persistence, and accumulation of PFAS in Plaintiffs' blood and/or bodies is offensive, unreasonable, and/or harmful, and thereby constitutes a battery.

202. The presence of PFAS in Plaintiffs' blood and/or bodies has altered the structure and/or function of such blood and/or body parts and resulted in the development of serious health issues, as described above.

203. As a direct and proximate result of the foregoing acts and omissions, Plaintiffs suffered and continue to suffer physical injury for which Defendants are therefore liable.

**COUNT III**  
**Strict Liability: Failure to Warn**

204. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

205. This cause of action is brought pursuant to West Virginia law. The West Virginia Supreme Court of Appeals has held that the general test for establishing strict liability in tort is whether the involved product was defective in the sense that it was not reasonably safe for its intended use. The standard of reasonable safeness was determined not by the particular manufacturer, but by what a reasonably prudent manufacturer's standards should have been at the time the product was made. *Morningstar v. Black & Decker Mfg. Co.*, 162 W. Va. 857. (W. Va. 1979).

206. Defendants knew or should have known: (a) exposure to AFFF containing PFAS was hazardous to the environment and to human health; (b) the manner in which they were designing, manufacturing, marketing, distributing, and selling AFFF containing PFAS was hazardous to human health; and (c) the manner in which they were manufacturing, marketing, distributing, and selling AFFF containing PFAS would result in the contamination of Plaintiffs' blood and/or bodies as a result of exposure.

207. Defendants had a duty to warn of the hazards associated with AFFF containing PFAS entering and poisoning Plaintiffs' blood and/or bodies because Defendants knew of the dangerous, hazardous, toxic, and poisonous properties of AFFF containing PFAS. Defendants failed to provide sufficient warning to purchasers that the use of their AFFF products would cause PFAS to be released into Plaintiffs and cause the exposure and bioaccumulation of these toxic and poisonous chemicals in Plaintiffs' blood and/or bodies.

208. Adequate instructions and warnings on the AFFF containing PFAS could have reduced or avoided these foreseeable risks of harm and injury to Plaintiffs. If Defendants provided adequate warnings: (a) Plaintiffs could have and would have taken measures to avoid or lessen exposure; and (b) end users and governments could have taken steps to reduce or prevent the release of PFASs into Plaintiffs' blood and/or bodies. Defendants' failure to warn was a direct and proximate cause of Plaintiffs' injuries from PFAS that came from the use, storage, and disposal of AFFF containing PFAS.

209. Defendants' failure to provide adequate and sufficient warnings for the AFFF containing PFAS they manufactured, designed, marketed, distributed, and sold renders the AFFF a defective product.

210. Defendants were negligent in their failure to provide Plaintiffs with adequate warnings or instruction that the use of Defendant's AFFF products would cause PFAS to be released into the Plaintiffs' blood and/or bodies.

211. As a result of Defendants' conduct and the resulting contamination, Plaintiffs have suffered, and continue to suffer, the development of serious health issues, as described above, because of exposure to AFFF containing PFAS.



212. Defendants' negligent failure to warn directly and proximately caused the harm to and damages suffered by Plaintiffs.

**COUNT IV**  
**Design Defect**

213. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

214. Defendants knew or should have known: (a) exposure to AFFF containing PFAS is hazardous to human health; (b) the manner in which AFFF containing PFAS was designed, manufactured, marketed, distributed, and sold was hazardous to human health; and (c) the manner in which AFFF containing PFAS was designed, manufactured, marketed, distributed, and could and would release PFAS into Plaintiffs and cause the exposure and bioaccumulation of these toxic and poisonous chemicals in Plaintiffs' blood and/or bodies.

215. Knowing of the dangerous and hazardous properties of the AFFF containing PFAS, Defendants could have designed, manufactured, marketed, distributed, and sold alternative designs or formulations of AFFF that did not contain hazardous, toxic, and poisonous PFAS. These alternative designs and formulations were already available, practical, and technologically feasible.

216. The use of these alternative designs would have reduced or prevented the reasonably foreseeable harm to Plaintiffs caused by the Defendants' manufacture, marketing, distribution, and sale of AFFF containing hazardous, toxic, and poisonous PFAS.

217. The AFFF containing PFAS that was designed, manufactured, marketed, distributed, and sold by the Defendants was so hazardous, toxic, poisonous, and dangerous to human health that the act of designing, formulating, manufacturing, marketing, distributing, and selling this AFFF was unreasonably dangerous under the circumstances.

218. The AFFF designed, formulated, manufactured, marketed, distributed, and sold by Defendants was defectively designed and the foreseeable risk of harm could and would have been reduced or eliminated by the adoption of a reasonable alternative design that was not unreasonably dangerous.

219. Defendants' defective design and formulation of AFFF containing PFAS was a direct and proximate cause of the contamination of Plaintiffs' blood and/or bodies and the persistence and accumulation of PFAS in Plaintiffs' blood and/or bodies, which has caused serious physical injuries, as described above.

220. Defendants' negligent failure to design a reasonably safe product directly and proximately caused the harm to and damages suffered by Plaintiffs.

**COUNT V**  
**Punitive Damages**

221. Plaintiffs incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full.

222. Upon information and belief, Defendants engaged in willful, wanton, malicious, and or/reckless conduct that was done without regard to the consequences or the safety of Plaintiffs and caused the foregoing injuries and disregarded the protected rights of the Plaintiffs.

223. Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to Defendants' failure to take all reasonable measures to ensure Plaintiffs was not exposed to PFAS which Defendants knew were linked to serious medical conditions.

224. Defendants have caused significant harm to Plaintiffs and have demonstrated a conscious and outrageous disregard for Plaintiffs' safety with implied malice, warranting the imposition of punitive damages.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs requests the Court enter judgment against the Defendants on each of the above-referenced claims as follows:

- (a) Finding Defendants jointly and severally liable for past, present, and future damages suffered by Plaintiffs;
- (b) Awarding compensatory damages in excess of the jurisdictional amount, including, but not limited to pain, suffering, emotional distress, loss of enjoyment of life, and other non-economic damages in an amount to be determined at trial of this action;
- (c) Awarding economic damages in the form of medical expenses, out of pocket expenses, lost earnings and other economic damages in an amount to be determined at trial of this action;
- (d) Punitive and/or exemplary damages for the wanton, willful, fraudulent, reckless acts of the Defendants who demonstrated a complete disregard and reckless indifference for the safety and welfare of the general public and to Plaintiffs in an amount sufficient to punish Defendants and deter future similar conduct; an order finding Defendants liable for conspiracy in the manner described herein;
- (f) Prejudgment interest;
- (g) Post judgment interest;
- (h) Awarding Plaintiffs reasonable attorneys' fees when applicable;
- (i) Awarding Plaintiffs the costs of these proceedings; and
- (j) Such other and further relief as this Court deems just and proper.

**DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand trial by jury as to all issues.

Date: November 3, 2021

/s/ Stephen G. Skinner

/s/ Levi B. Pellegrin

Stephen G. Skinner (WVND/WVSB No. 6725)

Levi B. Pellegrin (WVND/WVSB No. 13669)

SKINNER LAW FIRM

PO BOX 487

Charles Town, WV 25414

304-725-7029

[sskinner@skinnerfirm.com](mailto:sskinner@skinnerfirm.com)

[pellegrin@skinnerfirm.com](mailto:pellegrin@skinnerfirm.com)